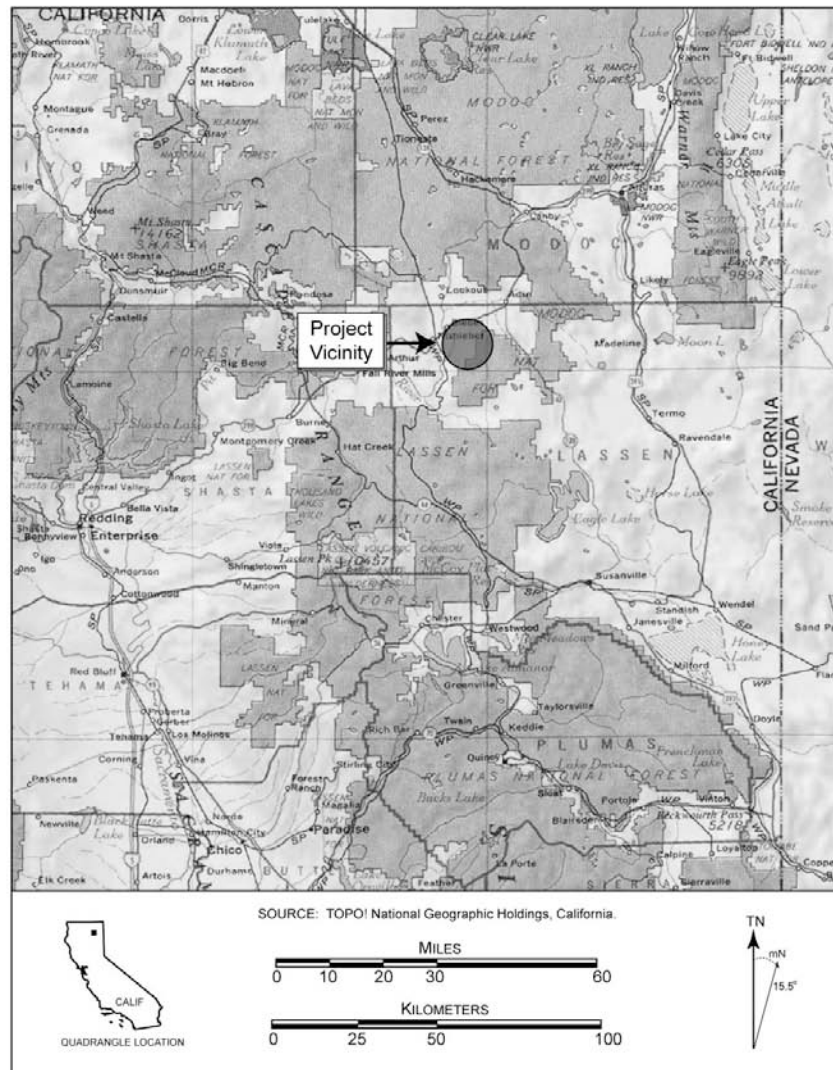


Archaeological Site Investigations Following the 2006 Pumpkin Fire Complex Lassen County, California

On June 26, 2006, California Department of Forestry and Fire Protection (CDF) crews responded to a fire caused by a lightning strike southeast of Bieber, California within the CDF Battalion 3 protection zone (Map 1). Fire suppression efforts included hand and dozer line construction and mop-up activities. Since it was not feasible to take steps to protect cultural resources while the fire was being actively suppressed, BLM Alturas Field Office cultural resources personnel undertook a Class III inventory of the dozer and hand lines on July 11th through 13th to determine if impacts to historic resources had occurred. Two previously unrecorded sites were indeed impacted, and given BLM numbers 37-08-08-03 and 37-08-09-03. A preliminary damage assessment report was produced by Bureau of Land Management Archaeologist Cheryl Foster-Curley in mid-July 2006, recommending further work.



Project Vicinity Map

CDF responded immediately by funding a limited archaeological investigation of the two sites in order to provide a detailed description and assessment of the resources, evaluate the importance of the remaining deposits, and guide CDF crews during site rehabilitation work. For this purpose, Pacific Legacy, Inc. was retained, a focused research plan agreed upon, and an archaeological crew was sent out on July 31st. Following fieldwork, the artifacts were catalogued, some special studies were performed (including one radiocarbon date and ten samples sent for obsidian hydration and source analysis). The findings were presented in the report entitled *California Department of Forestry and Fire Protection Archaeological Site Assessment at the Pumpkin Center Fire (CDF #3-9) Sites BLM 37-08-08-03 and BLM 37-08-09-03, Lassen County, California* by Shelly Tiley and Robert Jackson in October 2006.

A brief review of the findings at each site is presented below.

BLM 37-08-08-03

Site BLM 37-08-08-03 is a medium to large sized prehistoric encampment occupying two west-facing knolls above a seasonal drainage. The site location provides an excellent view of Big Valley below and Mt. Shasta to the north, and descends to a large, open meadow to the south-southwest. The main area of the site through which the dozer berm cut was designated Locus A; a second deposit located on a slope to the east was considered as a separate Locus, designated B.

The surface scatter in undisturbed portions of Locus A consists of a light to moderately dense flaked and ground stone scatter, with ground stone perhaps the more obvious (Figure 1-3). Tools are proportionally overrepresented on the surface, with biface fragments, projectile points, core and cobble tools, mortars, pestles, and handstones all present. Fire-affected rock and midden deposits are present, although these are confined to the area immediately adjacent (e.g. 3 to 8m) to the dozer berm.



Site 08-03, Locus A Facing North with Midden Visible in Dozer Cut

Fieldwork at BLM-37-08-08-03 began within an intensive survey of the area, and a collection of surface artifacts limited to tools. Observed artifacts were pin-flagged to assist in determining the nature and distribution of cultural constituents and site boundaries.

Excavation entailed the placement of four 1 x 1 meter (m) control units (CUs) at the site. The first (CU 1) was placed on the non-locus hill slope in order to get an undisturbed view of site deposits in the intact area of the site. Unit CU 2 was placed over a potential surface hearth feature approximately 6m east of the dozer cut in a small lobe of intact midden. Unit CU 3 was placed inside a possible rock enclosure ca. 7m west of the dozer cut. The final unit, CU 4, was excavated immediately east of the dozer cut berm in an area of very dark midden.



Katie Vallaire of Pacific Legacy excavates a surface hearth.



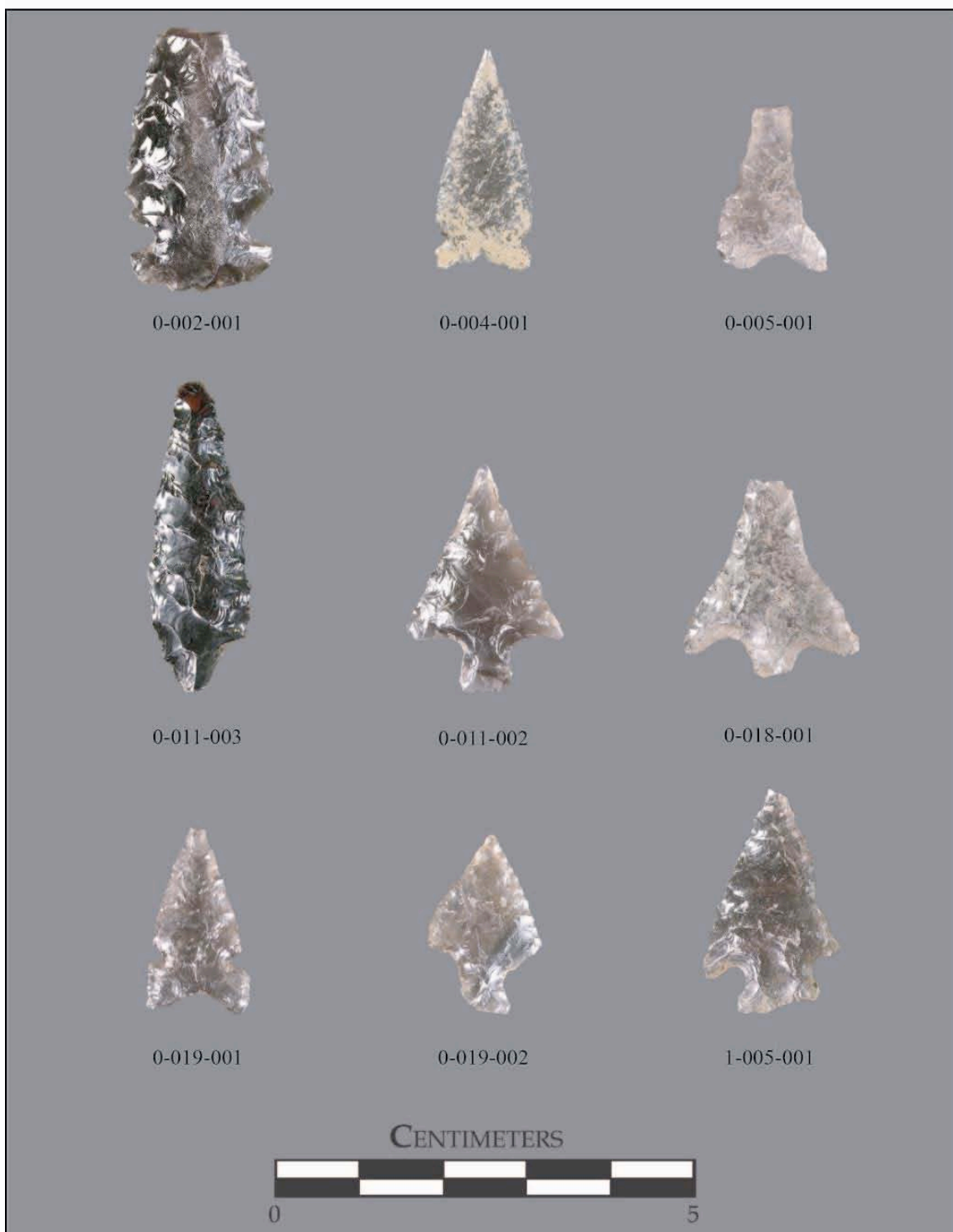
Circular Rock feature, Locus A

The assemblage for BLM 37-08-08-03 includes seventeen projectile points, eighteen bifaces, forty-one edge modified flakes, 815 pieces of debitage, five cores, 34 miscellaneous pieces of ground stone, one baked clay object, one piece of opalized wood, 9 pieces of mussel shell, and 165 faunal bone fragments.

Obsidian hydration and sourcing was performed on nine samples from this site. The results are summarized below; full documentation is provided in Appendix B.

Obsidian Sourcing and Hydration Data, Site BLM 37-08-08-03

Catalog No.	Unit	Depth	Artifact Type	Classification	Lithic Source	Hydration Rim
002-01	CU 1	0-10	Projectile point	Side-notched dart	GF/LIW/RS	4.9
002-07	CU 1	10-20	debitage	bipolar	Buck Mtn.	3.5
004-001	CU 1	20-30	Projectile point	Desert side-notched	Buck Mtn.	1.4
005-001	CU 1	30-40	Projectile point barb	Desert side-notched	Buck Mtn.	1.2
011-002	CU 2	10-20	Projectile point	Rosegate	Buck Mtn.	2.4
011-003	CU 2	10-20	Projectile point	Leaf-shaped	East Medicine Lake	3.6
018-001	CU 4	10-20	Projectile point	Rosegate	Buck Mtn.	1.5
019-001	CU 4	20-30	Projectile point	Desert side-notched	Buck Mtn	1.5
019-002	CU 4	20-30	Projectile point	Rosegate	Buck Mtn.	2.9



Projectile Points from CU-4.

One radiocarbon date was obtained from a sample taken from CU 1 in Locus B at 20-30cm. This level of CU 1 represented the densest portion of the deposit. The date returned a conventional radiocarbon age of 80 +/- 60 BP, leaving it uncertain whether the charcoal was from a recent fire.

The dozer cut clearly hit an important site deposit at Locus A but did not affect Locus B to the northeast. Within the disturbed area, abundant ground stone, flaked stone, a few pieces of mussel shell, and a bone tube were noted, in addition to the very charcoal-laden soils. The adjacent area consisted of much lighter soils and a sparse scatter of artifacts with almost as many pieces of ground stone as flakes. The two surface features noted by Foster-Curley (2006) were not impacted by the dozer cut.



The dozer cut at Locus A, BLM 37-08-08-03

BLM 37-08-09-03

Site BLM 37-08-09-03 is located on west-facing knoll immediately below a rock rim, with a view to the west of Mount Shasta. The main portion of the deposit remains intact, and occurs upslope of the dozer cut; most of the artifacts in the downhill portion appear to have been deposited by slopewash. The surface manifestation of the site consists of a lithic scatter with groundstone, although the latter is much less abundant than at BLM 37-08-08-03. A pothunter's pile occurs in the upper, treed portion of the slope.



Site 37-08-09-03 facing west

A comparable strategy was followed at site BLM 37-08-09-03. A much smaller site located on a similar hillslope, 09-03 revealed very few surface tools to collect. A collector's pile was located near the center of the site. A survey of the area revealed that the main concentration of cultural materials was located near the top of the hill beneath the rimrock, and most of the dark soil was also apparent upslope. The dozer cut was located near the base of the slope, and although cultural materials were apparent within the cut and downhill, these likely arrived there as a result of slopewash.



Site BLM 37-08-09-03 facing east

One control unit (CU 1) was excavated near the top of the slope where the soil color was darkest and the depositional environment suggested the possibility of deep and undisturbed soils. This unit was excavated to a depth of 60cm.



CU-1 at BLM 37-08-09-03

The assemblage for BLM 37-08-09-03 includes one projectile point, two bifaces, eight edge modified flakes, 112 pieces of debitage, one pestle, and 20 faunal bone fragments (Table 4-1).

Obsidian hydration and sourcing was performed on one sample from this site, a broken Elko projectile point from CU 1 at 40 to 50 cm. The piece was sourced to Buck Mountain, and yielded a hydration rim of 4.1 microns.

The impacts to site BLM-37-08-09-03 were not severe. Although the dozer cut measures 28.5m in length and has a maximum width of four meters, the cut was placed at the bottom of the hill, below the deeper deposits. The disturbed area, and the area downslope of it, contains ground and flaked stone artifacts and fire-affected rock, but these likely mainly washed down from the deeper soils above.

Recommendations and Results

During active fire suppression, cultural resource site avoidance is not always possible, especially in the case of previously unrecorded resources. What can be done, however, is to perform the sort of site assessment program described above to inform CDF's restoration efforts after the fire. As it turned out, both sites discovered retained deep, intact deposits that were undisturbed by the dozer lines. Recommendations were provided so that rehabilitation activities would not further impact the disturbed portions of the sites. At BLM 37-08-08-03, further mechanical disturbance was not recommended; rather, hand-smoothing of the berms and the placement of plants within the cut area to slow erosion and encourage new growth would serve to restore the area sufficiently. At site BLM 37-08-09-03, it was considered ideal to forestall any mechanical

restoration in favor of letting the area recover naturally, especially since erosion of major site deposits is not an issue here.

CDF's responsiveness allowed the protection of both of these sites from further damage, and provided a glimpse into the prehistory of an area that spans at least 5,000 years.